Date: Tue, 6 Apr 93 14:52:31 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #421
To: Info-Hams

Info-Hams Digest   Tue, 6 Apr 93   Volume 93 : Issue 421

Today's Topics:

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 4 Apr 93 22:06:33 GMT
From: news-mail-gateway@ucsd.edu
Subject: ANS-093 BULLETINS
To: info-hams@ucsd.edu

SB SAT @ AMSAT $ANS-093.01
STS-56 HAMVENTION READY TO FLY

HR AMSAT NEWS SERVICE BULLETIN 093.01 FROM AMSAT HQ
SILVER SPRING, MD APRIL 3, 1993
TO ALL RADIO AMATEURS BT
BID: $ANS-093.01

KA5HDO Provides Details About The STS-56 SAREX Mission

With the Space Shuttle Discovery ready for launch 06-APR-93, radio amateurs
around the world are looking forward to another exciting Shuttle Amateur
Radio Experiment (SAREX) mission this week. One outstanding feature about

this particular SAREX mission is the fact that ALL the astronauts flying on STS-56 are licensed radio amateurs! The crew for this mission includes Ken Cameron (KB5AWP), Ken Cockrell (KB5UAH), Mike Foale (KB5UAC), Ellen Ochoa (KB5TZZ), and Steve Oswald (KB5YSR). This eight day mission, with its orbital inclination of 57 degrees, will provide many excellent opportunities for earth-bound hams from northern Canada to Punta Arenas to make a SAREX contact. This will be the eighth mission that the SAREX payload has flown. For STS-56, the SAREX payload configuration has been set up to include 2M FM voice, Slow Scan TV (SSTV), 2M packet, and Amateur TV (ATV). The following is the list of frequencies that the STS-56 crew will use during this mission. Please note the regions where these frequencies are used.

SAREX Frequencies	Shuttle Downlink Frequencies	Shuttle Uplink 2M FM Voice Frequencies
U.S., Africa,	145.550 MHz	144.950 MHz
South America,	145.550	144.970
& Asia	145.550	144.910
Europe	145.550 MHz	144.950 MHz
	145.550	144.750
	145.550	144.700

AT NO TIME, SHOULD YOU EVER TRANSMIT ON THE SAREX DOWNLINK FREQUENCY OF 145.550 MHz. The packet uplink frequency will be 144.490 MHz and the downlink frequency will again be 145.550 MHz. The astronauts wish to remind those on the ground to wait until the Shuttle Discovery is a few degrees above the horizon so that you can hear the operator announce which uplink frequency is being used. At no time will the crew of STS-56 favor any particular frequency so your chance of making a connact will be based on the "luck of the draw."

The primary callsign to be used for the 2M FM voice contacts will be that of Ken Cameron (KB5AWP). The callsign for the packet station will be W5RRR-1 which many will recognize as the the callsign for the Johnson Spaceflight Center's (JSC) radio club of W5RRR. Likewise, the callsign to be used during SSTV operations will be W5RRR/S. The ATV contacts will only be made on prearranged schedules.

[The ANS would like to thank Frank Bauer (KA3HDO) of the SAREX Working Group for this bulletin item.]

/EX
SB SAT @ AMSAT $ANS-093.02
INFORMATION SOURCES DURING STS-56

HR AMSAT NEWS SERVICE BULLETIN 093.02 FROM AMSAT HQ
SILVER SPRING, MD APRIL 3, 1993

TO ALL RADIO AMATEURS BT
BID: $ANS-093.02

AMSAT, ARRL, WA3NAN, W5RRR To Provide Up-To-The-Minute Information

During the STS-56 SAREX mission radio amateurs can get up-to-the-minute information about the SAREX operations from the AMSAT News Service (ANS) bulletins and the many weekly AMSAT HF and VHF nets around the world. Also, the Goddard Amateur Radio Club in Greenbelt, MD will re-broadcast the shuttle voice audio as it has done on past SAREX missions. Included in these broadcasts will be the latest keplerian element set so that radio amateurs can predict Acquision-of-Signal (AOS) and Loss-of-Signal (LOS) times for STS-56. Likewise, the John Spaceflight Center (JSC) radio club, W5RRR, will also be a source for SAREX information. The following is the list of HF and VHF frequencies that radio amateurs can tune in on to find out the latest status of STS-56.

GSFC ARC WA3NAN Planned HF Operating Frequencies For SAREX Bulletins

```
 3.860 MHz            7.185 MHz  [Note: If you live in the Greenbelt, MD
14.295 Mhz           21.395 MHz   or Washington, DC area, you can listen
28.650 Mhz                        to WA3NAN re-broadcast on 147.450 MHz.]
```

JSC ARC W5RRR Planned HF Operating Frequencies For SAREX Bulletins

```
 7.225 MHz           28.650 MHz  [Note: If you live in the Houston, TX
14.280 Mhz                       area, you can listen W5RRR's shuttle
21.395 Mhz                       re-broadcast on 146.640 MHz.]
```

Also, the ARRL's station ,W1AW, will provide SAREX mission bulletins and keplerian elements during its daily bulletin broadcasts. See this months QST for information on the times and frequencies for W1AW's bulletin broadcasts. If you would like to find out about the technical details of the various scientific payloads on this particular shuttle mission, you are invited to call into the JSC landline BBS. To connect to the JSC BBS, use 1200 baud with 8 bits, no parity, and one stop bit, (8-N-1 1200 baud), and dial (713) 483-2500 then type 62511.

[The AMSAT News Service (ANS) would like to thank Frank Bauer (KA3HDO) for this bulletin item.]

/EX
SB SAT @ AMSAT $ANS-093.03
STS-56 INITIAL ORBITAL ELEMENTS

HR AMSAT NEWS SERVICE BULLETIN 093.03 FROM AMSAT HQ
SILVER SPRING, MD APRIL 3, 1993
TO ALL RADIO AMATEURS BT

BID: $ANS-093.03

Preliminary STS-56 Keplerian Elements

The planned launch date for STS-56 has now been set for 6-APR-93 at 05:32 UTC. The following elements should be used assuming that the STS-56 launch is on time.

```
STS-56
1 00056U          93 96.29075346  .00055200  00000-0  16200-3 0    56
2 00056  57.0020 177.4323 0011289 286.7156  73.2672 15.91759473    20

Satellite: STS-56
Catalog number: 00056
Epoch time:      93096.29075346   =    (6-APR-93 06:58:41.10 UTC)
Element set:     JSC-005
Inclination:       57.0020 deg
RA of node:       177.4323 deg          Space Shuttle Flight STS-56
Eccentricity:     .0011289              Prelaunch Keplerian Elements
Arg of perigee:   286.7156 deg          Launch: 6-APR-93 05:32 UTC
Mean anomaly:      73.2672 deg
Mean motion:   15.91759473 rev/day             G.L. Carman
Decay rate:    5.52000e-04 rev/day*2      NASA Johnson Space Center
Epoch rev:               2
```

[The AMSAT News Service (ANS) would like to thank Gill Carman for this set of keplerian elements for STS-56.]

/EX
SB SAT @ AMSAT $ANS-093.04
STS-56 QSL INFORMATION

HR AMSAT NEWS SERVICE BULLETIN 093.04 FROM AMSAT HQ
SILVER SPRING, MD APRIL 3, 1993
TO ALL RADIO AMATEURS BT
BID: $ANS-093.04

STS-56 QSL Information

All radio amateurs and short-wave listeners (SWL) are invited to send their signal reports and QSL cards to the following address for this STS-56 SAREX mission.

QSL Info: Send you QSL or Listeners Report to:

STS-56 QSL
c/o Vienna Wireless Society

P.O. Box 418
Vienna, VA 22183

Please include a self-addressed-stamped-envelope. Non-US stations should include the appropriate number of IRCs with your QSL.

Report should include callsign, whether worked/heard, date, UTC time, mode, frequency, and QSO number for packet connects.

/EX
SB SAT @ AMSAT $ANS-093.05
AMSAT OPS NET SCHEDULE

HR AMSAT NEWS SERVICE BULLETIN 093.05 FROM AMSAT HQ
SILVER SPRING, MD APRIL 3, 1993
TO ALL RADIO AMATEURS BT
BID: $ANS-093.05

AMSAT Operations Net Schedule

AMSAT Operations Nets are planned for the following times. Mode B Nets are conducted on an AO-13 on a downlink frequency of 145.950 MHz and Mode J/L on a downlink of 435.970 MHz.

Date	UTC	Mode	Phs	NCS	Alt NCS
10-Apr-93	2230	B	86	N7NQM	W5IU
19-Apr-93	0130	B	95	WB6LLO	WA5ZIB
24-Apr-93	1730	B	65	WA5ZIB	WJ9F

Any stations with information on current events would be most welcome. Also, those interested in discussing technical issues or who have questions about any particular aspect of OSCAR statellite operations are encouraged to join the OPS Nets. In the unlikely event that either the Net Control Station (NCS) or the alternate do not call on frequency, any participant is invited to act as the NCS.

****

Slow Scan Television on AO-13

SSTV sessions will be held on UTC Saturdays and Sundays:
Mode J Downlink 435.980 MHz
Mode B after J Downlink 145.960 MHz

OPS NETS will take priority, look for SSTV activity immediately after the net. SSTVer's are invited to join the Net to make schedules at other times if desired.

/EX
SB SAT @ AMSAT $ANS-093.06
POSSIBLE RS-15 KEP SET

HR AMSAT NEWS SERVICE BULLETIN 093.06 FROM AMSAT HQ
SILVER SPRING, MD APRIL 3, 1993
TO ALL RADIO AMATEURS BT
BID: $ANS-093.06

N3KVQ Works UP A Possible RS-15 Keplerian Element Set

In AMSAT News Service Bulletin (ANS) ANS-326.03 of 21-NOV-1992, Pat Gowen (G3IOR) provided some details about the upcoming RS-15 mission. RS-15 will be a Mode A transponder on board a Russian satellite. The circular orbit of this satellite is planned to be of 2300 KM altitude and orbital inclination of 63 degrees. The launch should occur between February and April 1993. RS-15 will be at more than twice the altitude of RS-10. The advantages of a higher orbit are longer pass times, wider areas of coverage, and less Doppler shift. The primary disadvatage is that the increased distance between the satellite and users may require more transmission power and/or beam antennas.

The orbital elements below are based upon the expected orbit parameters given by G3IOR. The launch was assumed to take place from Plesestk at 12:00 UTC on 1-APR-93 (no, this is not an April Fool's Day joke). Note that the epoch is for the ascending node of the initial orbit, not for launch time.

Satellite	RS-15
Catalog Number	99999
Epoch	93 91.56986454 04/01/93 13:40:36 UTC
Element Set	0
Inclination	63.0000 Deg
RAAN	319.9261 Deg
Eccentricity	0.0000000
Argument of Perigee	0.0000 Deg
Mean Anomaly	0.0000 Deg
Mean Motion	10.73887719 Rev/Day
Drag2	0.00000000 Rev/Day^2
Epoch Revolution	1

Semimajor Axis	8678.14 KM		
Precession	1.5375 Deg West/Day		
Period	134.09 Min		
Apogee	2300.00 KM	1429.15 SM	1241.90 Nm
Perigee	2300.00 KM	1429.15 SM	1241.90 Nm

These elements were generated using OrbiTrack, a Macintosh computer

satellite tracking program. To create orbital elements, the user selects the launch site and time, sets the inclination and apogee/perigee of the desired orbit, then issues the Calculate Orbit command to compute the rest of the parameters.

Apart from the information that G3IOR supplied in the previous ANS bulletin, no details about RS-15 have appeared in the Western literature. Please forward information about this upcoming mission and any questions about this bulletin to Walter Daniel (N3KVQ) via n3kvq@amsat.org (Internet) or N3KVQ@KA3RFE.MD.USA.NA (Packet).

/EX
SB SAT @ AMSAT $ANS-093.07
COMMAND ERROR FOILS DOHOP

HR AMSAT NEWS SERVICE BULLETIN 093.07 FROM AMSAT HQ
SILVER SPRING, MD APRIL 3, 1993
TO ALL RADIO AMATEURS BT
BID: $ANS-093.07

Command Error Foils Dual-Hop Experiment Between AO-21 & RS-10

G0NKA and G3IOR advise that due to an apparent error at the Russian military station GCC which commands RS-14/AO-21's "host" spacecraft, INFORMATOR-1, that the Dual-Hop test which had been scheduled for 28-MAR-93 did not take place. The command station turned on the satellite's 2M CW beacon but Mode-B Transponder #2 was not enabled as had been planned.

Several G stations, including G4CUO and G3IOR, were heard in the USA around the times originally scheduled for Dual-Hop, but these were transmitting on 2M directly through RS-10. Theirs was an accomplishment nonetheless, since RS-10 was slightly below the horizon in the UK when their downlink signals were heard in the US.

Additional Dual-Hop tests are planned in the coming months.

[The AMSAT News Service (ANS) would like to Ray Soifer (W2RS) for this bulletin item.]

/EX
SB SAT @ AMSAT $ANS-093.08
WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 093.08 FROM AMSAT HQ
SILVER SPRING, MD APRIL 3, 1993
TO ALL RADIO AMATEURS BT
BID: $ANS-093.08

Weekly OSCAR Status Reports: 03-APR-93

AO-13:
L QST *** AO-13 TRANSPONDER SCHEDULE *** 1993 Mar 22 - May 10
Mode-B : MA   0 to MA 90 !
Mode-BS : MA 90 to MA 120 !<- Mode-S Transponder;Mode-B Transponder is ON
Mode-S : MA 120 to MA 130 !<- Mode-S Transponder;Mode-B Transponder is OFF
Mode-LS : MA 130 to MA 135 !<- Mode-S Beacon + Mode-L Transponder
Mode-JL : MA 135 to MA 150 !   Blon/Blat 180/0
Mode-B : MA 150 to MA 256 ! Move S/C attitude to 210/0 on 10-May-93

Please don't uplink to the Mode-B transponder during MA 120-130. Your uplink transmissions will interfere with Mode-S users. Inorder to further encourage Mode-S enthusiasts and the use of the AO-13's Mode-S transponder, Mode-S is now ON for an additional 30 MA units, i.e. MA 90 to MA 135. During MA 90-120 you will have to endure the coupling from Mode-B users operating at 145.880-145.920 MHz. Either work between them, or use their signals as test signals. MA 120-130 is a Mode-S transponder exclusive (plus Mode-B beacon). MA 130-135 is Mode-S beacon (plus Mode-L transponder). [G3RUH/VK5AGR/DB2OS]

FO-20: The FO-20 ground control station, JJ1ZUT, announced that FO-20 operational schedule during April is follows:

    Analog Mode Operation:
    07-APR-93 09:52 UTC <---> 08-APR-93 10:12 UTC
    21-APR-93 10:45 UTC <---> 22-APR-93 11:00 UTC

    High Speed Telemetry Collection Mode Of Operation:
    12-APR-93 11:30 UTC <---> 19-APR-93 11:53 UTC

During the high speed telemetry collection period, FO-20's mailbox BBS is closed, however, FO-20 is available as a digipeater. The digital mode will be in operation unless otherwise noted above. [Kazu Sakamoto, JJ1WTK/3]

AO-16: Operating normally. [WH6I]

LO-19: Operating normally. [WH6I]

UO-22: Operating normally. Recent image file is up. [WH6I]

KO-23: Operating normally. There are currently 4 images. [WH6I]

RS-12: RS-12 is operating normally. There is not much activity on the day passes. It should be noted that the CW ROBOT on 29.453 MHz is back in operation for the first time in many months. [VE6AMB]

MIR: N9CXA and W5GEL report recent contacts with R2MIR, Alexander, on 2M FM voice on a downlink frequency of 145.550 MHz. [N9CXA & W5GEL]

/EX

Date: Mon, 05 Apr 93 05:40:31 GMT
From: swrinde!zaphod.mps.ohio-state.edu!mstar!n8emr!bulletin@network.UCSD.EDU
Subject: Keplerian Bulletin 14 ARLK014
To: info-hams@ucsd.edu

ZCZC SK26
QST de W1AW
Keplerian Bulletin 14 ARLK014
>From ARRL Headquarters
Newington, CT April 3, 1993
To all radio amateurs

SB KEP ARL ARLK014
ARLK014 Keplerian data

Thanks to NASA, AMSAT and N3FKV for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058 B 93086.54729714 0.00000030   99999-4 0 9807
2 14129 27.0769 33.3255 6013784 68.5627 343.3267 2.05875703 45615
RS-10/11
1 18129U 87054 A 93091.89179851 0.00000041   38793-4 0 5865
2 18129 82.9224 295.0105 0011527 162.5656 197.5893 13.72312279289388
UO-11
1 14781U 84021 B 93084.58379548 0.00000825   14891-3 0 4073
2 14781 97.8193 114.6541 0010496 266.6006 93.3996 14.68922379484442
RS-12/13
1 21089U 91007 A 93088.74695223 0.00000065   62998-4 0 3973
2 21089 82.9219 341.0305 0028665 267.5693 92.2177 13.74018187107617
AO-13

1 19216U 88051 B 93090.76117218 -.00000201   99999-4 0 5869
2 19216 57.7111 324.6407 7251766 311.7763   5.9706 2.09726329 5238
UO-14
1 20437U 90005 B 93088.22485108 0.00000194   83097-4 0 7349
2 20437 98.6203 173.3874 0011549 58.0849 302.1455 14.29753419166001
AO-16
1 20439U 90005 D 93089.76783177 0.00000211   90049-4 0 5497
2 20439 98.6231 175.7210 0012061 53.8452 306.3845 14.29814790166231
DO-17
1 20440U 90005 E 93088.15533154 0.00000217   91859-4 0 5518
2 20440 98.6270 174.3215 0011989 59.1983 301.0379 14.29948204166010
WO-18
1 20441U 90005 F 93084.76501357 0.00000193   82469-4 0 5534
2 20441 98.6263 170.9940 0013018 68.4482 291.8085 14.29928420165536
LO-19
1 20442U 90005 G 93086.24143936 0.00000187   80239-4 0 5508
2 20442 98.6276 172.6190 0012795 63.8544 296.3951 14.30017242165755
FO-20
1 20480U 90013 C 93080.61382554 -.00000013   75414-6 0 4414
2 20480 99.0557 313.3439 0539952 285.0751 69.1261 12.83218206146085
AO-21
1 21087U 91006 A 93091.54208460 0.00000056   52123-4 0 7305
2 21087 82.9389 109.5563 0033840 234.5714 125.2271 13.74513505108915
UO-22
1 21575U 91050 B 93091.08602551 0.00000259   10182-3 0 2492
2 21575 98.4805 168.4281 0007380 165.3488 194.7914 14.36803758 89590
KO-23
1 22077U 92052 B 93088.03576321 0.00000000   99999-4 0   967
2 22077 66.0783 132.0060 0009074 207.7782 150.9961 12.86277591 29533
Mir
1 16609U 86017 A 93091.81813295 0.00007355   10403-3 0 9825
2 16609 51.6189 242.8855 0001794 133.1812 226.9386 15.57656781407220

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
April 6, 1993, at 2230z on Baudot, AMTOR and ASII.
NNNN

Date: 4 Apr 93 23:18:24 GMT
From: news-mail-gateway@ucsd.edu
Subject: ORBS$094.2liners
To: info-hams@ucsd.edu

SB KEPS @ AMSAT $ORBS-094.N
2Line Orbital Elements 094.AMSAT

HR AMSAT ORBITAL ELEMENTS FOR AMATEUR SATELLITES IN NASA FORMAT
FROM N3FKV HEWITT, TX   April 4, 1993
BID:$ORBS-094.N

DECODE 2-LINE ELSETS WITH THE FOLLOWING KEY:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

TO ALL RADIO AMATEURS BT

AO-10
1 14129U 83 58 B 93086.54729714 .00000030 00000-0 99999-4 0 9808
2 14129 27.0769 33.3255 6013784 68.5627 343.3267 2.05875703 73582
UO-11
1 14781U 84 21 B 93084.58379548 .00000825 00000-0 14891-3 0 4074
2 14781 97.8193 114.6541 0010496 266.6006 93.3996 14.68922379484442
RS-10/11
1 18129U 87 54 A 93091.89179851 .00000041 00000-0 38793-4 0 5866
2 18129 82.9224 295.0105 0011527 162.5656 197.5893 13.72312279289388
AO-13
1 19216U 88 51 B 93090.76117218 -.00000201 00000-0 99999-4 0 5860
2 19216 57.7111 324.6407 7251766 311.7763   5.9706 2.09726329 36737
FO-20
1 20480U 90 13 C 93080.61382554 -.00000013 00000-0 75414-6 0 4415
2 20480 99.0557 313.3439 0539952 285.0751 69.1261 12.83218206146085
AO-21
1 21087U 91 6 A 93091.54208460 .00000056 00000-0 52123-4 0 7306
2 21087 82.9389 109.5563 0033840 234.5714 125.2271 13.74513505108915
RS-12/13
1 21089U 91 7 A 93088.74695223 .00000065 00000-0 62998-4 0 3974
2 21089 82.9219 341.0305 0028665 267.5693 92.2177 13.74018187107617
UO-14
1 20437U 90 5 B 93088.22485108 .00000194 00000-0 83097-4 0 7340
2 20437 98.6203 173.3874 0011549 58.0849 302.1455 14.29753419166001
AO-16
1 20439U 90 5 D 93089.76783177 .00000211 00000-0 90049-4 0 5498
2 20439 98.6231 175.7210 0012061 53.8452 306.3845 14.29814790166231
DO-17
1 20440U 90 5 E 93088.15533154 .00000217 00000-0 91859-4 0 5519
2 20440 98.6270 174.3215 0011989 59.1983 301.0379 14.29948204166010
WO-18
1 20441U 90 5 F 93084.76501357 .00000193 00000-0 82469-4 0 5535
2 20441 98.6263 170.9940 0013018 68.4482 291.8085 14.29928420165536
LO-19
1 20442U 90 5 G 93086.24143936 .00000187 00000-0 80239-4 0 5509
2 20442 98.6276 172.6190 0012795 63.8544 296.3951 14.30017242165755

```
UO-22
1 21575U 91 50  B 93091.08602551  .00000259  00000-0  10182-3 0  2493
2 21575  98.4805 168.4281 0007380 165.3488 194.7914 14.36803758 89590
KO-23
1 22077U 92 52  B 93070.30867943  .00000000  00000-0  99999-4 0   940
2 22077  66.0779 169.1155 0009657 210.7767 149.2671 12.86276851 27252
NOAA-9
1 15427U 84123  A 93092.05510216  .00000187  00000-0  11979-3 0  3338
2 15427  99.1106 130.8943 0015586  25.8859 334.3082 14.13498056428027
NOAA-10
1 16969U 86 73  A 93092.29652967  .00000213  00000-0  99310-4 0  1774
2 16969  98.5209 109.5473 0013077 172.7646 187.3744 14.24786632339828
MET-2/17
1 18820U 88  5  A 93088.48701399  .00000051  00000-0  39833-4 0  8613
2 18820  82.5379 262.3021 0017182 354.2197   5.8762 13.84677491260816
MET-3/2
1 19336U 88 64  A 93089.02840148  .00000043  00000-0  99999-4 0   317
2 19336  82.5378 277.9660 0016850 296.4490  63.4920 13.16956896224790
NOAA-11
1 19531U 88 89  A 93092.32422234  .00000217  00000-0  13761-3 0   821
2 19531  99.1252  66.6478 0011233 295.7110  64.2915 14.12853169232960
MET-2/18
1 19851U 89 18  A 93088.14141918  .00000101  00000-0  85047-4 0  7995
2 19851  82.5229 138.7478 0015608  38.0649 322.1610 13.84328640206116
MET-3/3
1 20305U 89 86  A 93080.91293756  .00000043  00000-0  99999-4 0  7009
2 20305  82.5429 226.4087 0015982 338.7233  21.3222 13.16009487163624
MET-2/19
1 20670U 90 57  A 93087.37456067  .00000079  00000-0  65380-4 0  5506
2 20670  82.5455 202.5576 0014545 323.9188  36.0990 13.84166393138942
FY-1/2
1 20788U 90 81  A 93090.57512482  .00000415  00000-0  29746-3 0  5377
2 20788  98.8712 119.0972 0014810 157.6078 202.5737 14.01300029131718
MET-2/20
1 20826U 90 86  A 93087.61478782  .00000108  00000-0  92434-4 0  5554
2 20826  82.5279 140.5000 0012102 214.5983 145.4392 13.83542302126144
MET-3/4
1 21232U 91 30  A 93091.07626134  .00000043  00000-0  99999-4 0  3534
2 21232  82.5479 122.2834 0017093 226.4014 133.5486 13.16821917 93177
NOAA-12
1 21263U 91 32  A 93092.25916697  .00000292  00000-0  14865-3 0  5375
2 21263  98.6649 123.6840 0014026  74.8930 285.3804 14.22230225 97858
MET-3/5
1 21655U 91 56  A 93083.63362416  .00000043  00000-0  99999-4 0  4119
2 21655  82.5508  74.2340 0012276 240.3095 119.6806 13.16817293 77297
MIR
1 16609U 86 17  A 93091.81813295  .00007355  00000-0  10403-3 0  9826
2 16609  51.6189 242.8855 0001794 133.1812 226.9386 15.57656781407220
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HUBBLE
1 20580U 90 37  B 93091.52838432  .00002454  00000-0  21888-3 0   661
2 20580  28.4714 198.2517 0004833 327.2153  32.8110 14.92535808160059
GRO
1 21225U 91 27  B 93089.52679688  .00045743  00000-0  33171-3 0  8542
2 21225  28.4666 149.8248 0004062 316.2833  43.7469 15.71932244112858
TUBSAT
1 21577U 91 50  D 93085.05339066  .00000203  00000-0  76303-4 0  2489
2 21577  98.4819 162.1257 0006218 185.2227 174.8900 14.36355291 88702
SARA
1 21578U 91 50  E 93089.21558377  .00001194  00000-0  40586-3 0  4160
2 21578  98.4859 167.5503 0004989 176.0256 184.0971 14.38330229 89374
FREJA
1 22161U 92 64  A 93091.06650355 -.00000002  00000-0  22350-4 0  1222
2 22161  63.0095 330.7165 0770460 276.0094  75.3711 13.21613899 23365
/EX

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Date: 3 Apr 93 07:20:58 GMT
From: cs.ubc.ca!unixg.ubc.ca!kakwa.ucs.ualberta.ca!ersys!adec23!ve6mgs!rec-radio-
info@beaver.cs.washington.edu
Subject: rsgb gb2rs news 4th april 1993
To: info-hams@ucsd.edu

Good morning. It's Sunday the 4th of April and here is the GB2RS news
broadcast, prepared by the Radio Society of Great Britain.

First the headlines:- 18MHz-band intruders have been removed by RSGB; there
are two new RSGB committee chairmen; and we have urgent news for Top band ARDF
enthusiasts.


The RSGB's Monitoring System, otherwise known as the Intruder Watch, has had
four recent successes which have been of benefit to all radio amateurs. An
Argentinian fax, naval data and two diplomatic stations have been removed from
the 18MHz band with the assistance of the Radiocommunications Agency. Brief
details of the role of the Monitoring System can be found on page 78 of the
RSGB Call Book and a fuller description is in the December 1992 edition of
Radio Communication. The Coordinator of this RSGB service is David Owen,
G0OES.

The RSGB Microwave Committee has a new chairman. He is Steve Davies, G4KNZ.
The previous Chairman, Mike Dixon, G3PFR, become the Microwave Manager. The
RSGB Planning Advisory Committee also has a new chairman. He is Geoff Bond,
G4GJB. Details of the Society's other office-holders can be found in the April
edition of RadCom.
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The RSGB'93 Show takes place on Sunday the 16th of May at the National Exhibition Centre, near Birmingham. There will be the usual trade stands in a single huge hall, plus a large display of the work of RSGB Headquarters and of the Society's committees. The National Vintage Communications Fair is also being held that day in the NEC complex. Many visitors will wish to visit both shows and reduced rates are available for this.

Next details of two ARDF event which, unfortunately have not appeared in Radio Communication. The Top Band Amateur Radio Direction Finding contest for the Geoff Peck Memorial Trophy take place today Sunday the 4th at Cowleaze Wood, Stokenchurch, at NGR 727 958. Competitors need Map 165, Aylesbury and Leighton Buzzard. Competitors should assemble at 13.00 for a 13.20 start. The next Top Band ARDF is the Slade Qualifying Event which is scheduled for Sunday the 18th of April. The venue is the Industrial Estate, 2 kilometres East of Bridgenorth at NGR 739 927 found on Map 138, Kidderminster and Wyre Forest. Competitors should assemble at 13.00, to start at 13.20. Competitors requiring tea should notify John Drakeley on 021 772 2278 (work) or 021 770 3474 (home), no later than Sunday the 11th of April.

Now some items of HF DX news from the weekly RSGB DX News Sheet which is edited by Brendan McCartney, G4DYO.

Date: Mon, 5 Apr 1993 13:59:47 GMT
From: usc!wupost!uwm.edu!linac!att!cbnewse!waco@network.UCSD.EDU
Subject: Worked him????/DXing practices
To: info-hams@ucsd.edu

In regard to this thread on working a station without copying the call sign, I have a pet peeve in DXing. How often do you hear a QSO that sounds something like this? (Using my own call for illustrative purposes, I don't do this.) However, I am not without guilt. When I run across a pileup, I listen to try to determine who the DX is. Often, a DX station seems to never send a call. So, to be sure. I will work the station without using the DX's call (not necessary anyway, unfortunately) and hang around the frequency until I find out who the station is.

DX: QRZ

I: GERMANY JAPAN, GERMANY JAPAN, GERMANY JAPAN...

DX: THE WHISKEY GOLF STATION, YOU'RE FIVE AND NINE

FULL CALL OF ****WG: QSL THE FIVE NINE, YOU'RE ALSO FIVE NINE, QSL?

DX: QRZ

I: GERMANY JAPAN ...

DX: THE GERMANY JAPAN STATION, FIFTY NINE, QSL?

I: QSL THE FIVE NINE; YOU'R ALSO FIVE NINE, FIFTY NINE. WHAT'S YOUR CALL? CAN YOU REPEAT YOUR CALL AND QSL MANAGER?

DX: QRZ

I: WHO IS THIS GUY? WHERE'S HE AT? WHAT'S HIS CALL? (Never answered by others on frequency as they are trying to work the DX, not answer questions from some nerd QRMing the frequency with stupid questions.

The only thing worse than giving 59 (599) reports when you don't even know who you are working is the DXpeditions that have their QSL cards preprinted with signal reports of 59 or 599 (Yes, I have some). However, i dislike what appears to be a standard net practice: This is net control -- please don't use the other station's call, he/she knows who he/she is, just use his/her first name. Coming across a net like this one hears:

Margaret -- this is *****, you're 59, 59, QSL?

***** QSL the 59, youre also 59.

Pedro -- this is ##### your 33, 3 by 3, QSL?

QSL the 3 by 3, you're also 3 by 3, 3 by 3, QSL?

etc.

Problem here is a person just coming on frequency doesn't have much of an idea who Margaret or Pedro or the others are, so they insist on asking just when the weakest DX station is giving someone a report. I think a good idea is to ALWAYS call the DX using the DX station's call; this practice seems to result in a much more orderly pileup with more stations getting through with less QRM.

Many hams dislike DX nets, or nets of any kind, but you're most likely to hear REAL signal reports exchanged on a net than the "typical" DXpedition (the whole world is 59, right?). Hey, if I hadn't been on the YL ISSB's net a few years ago at the right time, I wouldn't have JY25's (JY1's special picture QSL card celebrating his 25th year as monarch) on the wall.

Time now to step off the soap box.

73,

John, WB9VGJ


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##############################################################################
# John L. Broughton      snail mail: Room 1K-324               #
# AT&T                               1200 E. Warrenville Rd.   #
#                                    P.O. Box 3045             #
#                                    Naperville, IL 60566-7045 #
#                                    (708) 713-4319            #
#                           e-mail: john.l.broughton@att.com  #
#                                    att!john.l.broughton      #
#                                    ihlpe!waco                #
#                 air mail (HF, VHF): WB9VGJ                   #
##############################################################################
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Date: (null)
From: (null)
Rally news now, and we know of two events for today, Sunday the 4th.

The Launceston Amateur Radio Rally is being held at the Launceston College in Cornwall. Doors open at 10.30am. There are the usual traders, a large bring & buy stall in two large halls. Hot snacks and refreshments are available and talk-in is on channel S22.

The White Rose Amateur Radio Society Radio Rally is being held at the Allerton High School, Kings Lane, Leeds 17. Doors open at 11.00am. 10.15am for disabled visitors. There are the usual trade stands, an RSGB stand and a bring & buy stall. Refreshments are available.

We know of no scheduled event for the Easter Weekend, Friday the 9th to Monday the 12th.

Contest news next:

The first of the RSGB Slow CW Cumulative Contests is tomorrow, Monday the 5th, from 1830 to 2000GMT, using 3.530 to 3.580MHz only. See March RadCom, page 81 for the rules which emphasise the importance of sending slowly during the event. The RSGB's first 1296/2320MHz Fixed Contest will take place on Sunday the 11th of April from 1600 to 2200GMT. See February's RadCom page 66 for the rules.

Special event Station GB2RN, operated by the Royal Naval Amateur Radio Society will be aired during Easter week. Activity starts on Saturday the 10th of April, and runs through to Sunday the 18th. Station is operated from the Bridge Wireless Office on HMS Belfast, located in the Upper Pool of London, between London and Tower Bridge. Check these frequencies: 1.970, 3.660, 3.740, 7.090, 14.190, 21.360 and 29.933MHz, CW and SSB as appropriate. Operation will

also be on 2 metres FM and SSB. The local Packet Bulletin board will be GB7HSN, accessed on 2 metres.

Time to get your diaries out as we have news of the eighth AMSAT-UK Annual Colloquium which will be held from the 29th of July to the 1st of August at the usual venue, the University of Surrey. Anyone wishing to present a paper should submit an abstract no later than the 1st of May to: Doug Loughmiller G0SYX, Colloquium Programme Chairman, Centre for Satellite Engineering Research, University of Surrey, Guildford GU2 5XH. Booking forms for visitors to the Colloquium will be available from the 15th May. Requests for forms and any enquiries should go to: Ron Broadbent, Hon Sec AMSAT-UK, London E12 5EQ, enclosing a large self-addressed, stamped envelope.

And now the solar factual data

For the period 22nd to 28th March, magnetic storms seriously affected northern latitudes but were declining by the end of the period. Only one flare of any note was reported, an M2.3/SF on the 23rd. Otherwise only small B and C flares were reported. Sunspot counts have meaned about the 67s and solar flux levels have averaged 121 units hardly changing day to day. The geomagnetic Ap index was up to full storm levels of 47 units on the 24th, about K7, due to a mag storm starting at 21.55 hours on the 23rd, and though levels declined it remained unsettled up to the end of the period. The Ap average for the period was 23.2 units. The state has been mag storm at northern latitudes and 'Strat warm in final stage'. The radio quality indices have declined with the magnetic storm and were down to very poor on the 24th. The Stavanger circuits were almost useless, with Moscow and New York being only slightly better. Due to a mistake the aa indices were sent out for the wrong period, so are not to hand this week. The X-ray flux has been very low and averaged only B2.3, though the 24th was down to only B1.9. Levels were recovering as this bulletin was being prepared. Bartells rotation started on the second of April.

Now the ionospheric data for Central France:

Not all the data is to hand but the F2 daytime critical frequencies at Poitiers, as reported by Meudon, have declined considerably and averaged only about 8.4MHz. On the 24th it was only 6.1MHz due to the magnetic storm. The darkness hour lows were not affected so much, being about 3.0MHz. There has been periods of spread-F most days.

Now the ionospheric data for the north:

The F2 daytime critical frequencies at Ekaterinberg have declined. The daily highs averaged 8.2MHz and the darkness hour lows 3.2MHz. Solar cycle 22 is still giving us surprises, after month 77 it is recording the second highest mean level of solar flux, surpassed only by the highest cycle ever recorded, cycle 19. It is also higher than the mean level of all passed cycles at this time since solar flux has been measured.

And lastly the solar forecast:

This week, the most active side of the sun will be rotating away. Solar flux levels are expected to be about the 150s. Geomagnetic activity is expected to be unsettled due to the passage of coronal holes, and on the basis of history the radio quality indices are expected to be normal. MUFs are expected to reach 30MHz during the day on north/south circuits. Darkness hours are expected to reach about 18MHz. And that's the end of the solar information.

Finally in the main news, SSL has informed the Society that as of last Wednesday morning, the latest callsigns issued were in the G0 T J and G7 O T series, and Novice calls in the 2 0 A E and 2 1 B P series.

You're listening to GB2RS, the news broadcasting service of the Radio Society of Great Britain, transmitting in the 80, 40, 6 and 2 metre bands.

Date: (null)
From: (null)
Saturday the 10th of April. Check these frequencies: for CW 1832, 3505, 7005, 10105, 14020, 18075, 21020, 24900, 28020kHz and for SSB 1840, 3645, 3775, 3795, 7045, 7080, 14195, 18125, 21295, 24940, 28395kHz, RTTY 14090, 21090, 28090kHz From Liberia, F6FYD holds the call sign EL2YD and will be intermittently on the air until the end of 1993. From Liechtenstein, HB9BCK will be active as HB0/HB9BCK from Sunday the 11th until Saturday the 17th of April. From Kampuchea, F1MXQ will be active as XU5SE from now until mid-June.

End of Info-Hams Digest V93 #421
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